10/03/2005 09:59

4408996072

PATENT

PAGE 03/06

Applicant:

David G. Clash

Art Unit: Examiner: 1745

Tracy Mae Dove

Serial No.: Filed:

10/784,749

February 23, 2004

For:

Zinc Shapes for Anodes of Electrochemical Cells

CLAIM AMENDMENTS

- 1. (canceled)
- 2. (canceled)
- 3. (canceled)
- 4. (canceled)
- 5. (canceled)
- 6. (canceled)
- 7. (canceled)
- 8. (canceled)
- 9. (canceled)
- 10. (canceled)
- 11. (canceled)
- 12. (canceled)
- 13. (canceled)
- 14. (canceled)
- 15. (canceled)
- 16. (canceled)
- 17. (canceled)
- 18. (canceled)
- 19. (canceled)
- 20. (currently amended) An electrochemical cell comprising a non-mercury added zinc anode comprising uniformly shaped zinc particles having consistent smooth surface finishes.

Applicant:

David G. Clash

Art Unit: Examiner: 1745

Tracy Mae Dove

Serial No.: Filed:

10/784,749

For:

February 23, 2004

Zinc Shapes for Anodes of Electrochemical Cells

21. (canceled)

- 22. (previously presented) The electrochemical cell defined in claim 20 wherein said zinc particles comprise consistent porosity characteristics.
- 23. (previously presented) The electrochemical cell defined in claim 22 wherein said porosity is greater than 25 percent.
- 24. (previously presented) The electrochemical cell defined in claim 23 wherein said porosity is greater than 50 percent.
- 25. (previously presented) The electrochemical cell defined in claim 20 wherein said uniformly shaped zinc particles have a morphology selected from the group consisting of filament, donut, biscuit, tentacle, snake, corrugated, helix, dog bone, sponge, honeycomb, and foam.
- 26. (previously presented) The electrochemical cell defined in claim 20 wherein said uniformly shaped zinc particles have a tap density less than 2.5 g/cc.
- 27. (previously presented) The electrochemical cell defined in claim 20 wherein said uniformly shaped zinc particles have a tap density less than 2.0 g/cc.
- 28. (previously presented) The electrochemical cell defined in claim 20 wherein said uniformly shaped zinc particles have a tap density less than 1.5 g/cc.
- 29. (previously presented) The electrochemical cell defined in claim 20 wherein said uniformly shaped zinc particles have a tap density less than 1.3 g/cc
- 30. (previously presented) The electrochemical cell defined in claim 20 wherein said anode has a zinc weight concentration less than 70 percent.
- 31. (previously presented) The electrochemical cell defined in claim 20 wherein said anode has a zinc weight concentration less than 68 percent.

Applicant:

David G. Clash

10/784,749

Art Unit: Examiner: 1745

Tracy Mae Dove

Serial No.: Filed:

February 23, 2004

For:

Zinc Shapes for Anodes of Electrochemical Cells

- 32. (original) The electrochemical cell defined in claim 20 wherein said anode has a zinc weight concentration less than 66 percent.
- 33. (previously presented) The electrochemical cell defined in claim 20 wherein said anode has a zinc weight concentration less than 64 percent.
- 34. (previously presented) The electrochemical cell defined in claim 20 wherein said anode has a zinc weight concentration less than 62 percent.
- 35. (canceled)
- 36. (canceled)
- 37. (canceled)
- 38. (canceled)
- 39. (canceled)
- 40. (new) An electrochemical cell comprising a non-mercury added zinc anode comprising uniformly shaped zinc particles having consistent surface finishes and consistent porosity characteristics wherein said porosity is greater than 25 percent.
- 41. (new) The electrochemical cell defined in claim 40 wherein said porosity is greater than 50 percent.